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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Akiko Onishi

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FITZPATRICK CELLA HARPER & SCINTO

1290 Avenue of the Americas

NEW YORK, NY 10104-3800

EXAMINER

DICKERSON, CHAD S

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/734,211	Applicant(s) ONISHI, AKIKO	
	Examiner CHAD DICKERSON	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 15, 17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 15, 17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/15/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 8, filed 12/4/2010, with respect to the 112 1st paragraph rejections have been fully considered and are persuasive. The 112 1st paragraph rejections of claims 1-6, 17, 19 and 21 has been withdrawn.

2. Applicant's arguments with respect to claims 1-6 and 15, 17 and 19-21 have been considered but are moot in view of the new ground(s) of rejection. The same reference of Mori '696 and Gillihan '262 are still being applied. The reference of Matsumoto is being added to disclose the features within the independent claims. Within the arguments accompanying the new ground(s) of rejection, the Applicant asserted that the Mori reference fails to disclose the features of (1) having printable region sizes for borderless printing being sent to an application when one of the borderless printing and printing with a border is set using two settings screens associated with the front and back attributes and (2) generating print data of a page which corresponds to the side of the printing with a border by specifying the original data of the printable region for printing with the border from the original data for the borderless printing. The Examiner respectfully disagrees with these assertions.

In regards to the first assertion, it is believed that the combination of the Mori '696 reference and the Matsumoto '104 reference performs this newly claimed feature. The Mori reference discloses having a book with several chapters. As stated in the action, the Examiner believes that the chapter dialogue box can edit the feature of border free printing for back side pages. For example, if the chapter contains a page with multiple

images, the Examiner considers the chapter dialogue box that modifies this page with images of multiple pages as a second screen that deals with back sides of a sheet¹.

Both the book dialogue box and the chapter dialogue box shown in figures 14-16 edit the book binding process of the whole of the print data, and with the above explanation, it is believed that the back-sides of the pages within the chapter dialogue box can also be set for border or border free printing². Therefore, the feature of having two screens with border or border free attributes applied to both sides of a page is performed.

Also, the book editing application (104) is used to receive the different print sizes and border free printing option. This application is able to send this information to other applications such as the despooler (105) or driver (106). This performs the feature of having a program send information related to the printable regions on the sheet along with the border free printing attribute to another application. Meanwhile, the Matsumoto '104 reference is combined with the above reference to perform the feature of having a wider printable region for printing when performing borderless printing versus printing with a border³.

In addition, the Matsumoto reference discloses a print controller where a user can choose the option of having border or border free printing performed for each page. This additional feature can be applied to modify the Mori reference to allow the page level to modify the border or border free printing option, since the Matsumoto reference changes the border free option per page in the system⁴.

¹ See Mori '696 at col. 10, ll. 31-col. 12, ll. 10.

² Id. at col. 17, ll. 15-42 and figures 14-16.

³ See Matsumoto '104 at col. 16, ll. 21-col. 17, ll. 30.

⁴ Id. at col. 12, ll. 17-32.

Lastly, regarding the second assertion, the Examiner believes that this feature is performed as well. Within the Mori '696 reference, the system involves printing data with and without a border. The original data pertaining to the borderless printing can be on a front side of a page while border printing can be on the back side of a page, which can reflect different chapters on different sides of a page⁵. The system can associate original information for borderless pages while also associating other original pages with the pages printed with borders. Here, the system specifies the original data being printed with a border from the original data being printed without a border.

Therefore, the Examiner believes that with the above explanations, the claim limitations are performed below in view of the abovementioned references.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-6, 17, 19 and 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 and 17 are both considered as non-statutory since both involve method steps but do not include the physical structure that performs the method steps. It is recommended that the physical unit that performs the specific step be included in the claims. Claims 2-6, 19 and 21 are all rejected based on their dependency.

⁵ See Mori '696 col. 12, ll. 1-9.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5, 6, 15, 17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696 (USP 7194696) in view of Matsumoto '104 (USP 5953104).

Re claim 1: Mori '696 discloses a printing control method of converting original data into print data processible by a printing apparatus, comprising the steps of:

displaying a first setting screen to set a basic attribute applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is

able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

sending a size of a printable region for borderless printing to an application when one of the borderless printing and printing with a border is set in the basic attribute received via the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing. This includes the size of the paper used. The size of the paper can be selected with borderless or border printing; see figs. 3-4B and 14; col. 11, lines 26-50) and

another is set in the back-side attribute received via the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed. Also, with the page attributes set for a plurality of pages, this if there are 6 pages that contain 3 of front and back sides, the setting of a page attribute may set both sides of the pages in accordance with a certain setting and this would perform the feature of setting a back-

side attribute of back sides of sheets; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62),

receiving the original data for the borderless printing from the application (i.e. the book editing application can be used to send the original data that will be used for borderless printing to further programs or applications in the pipeline in order for the image data to be output; see col. 8, ll. 35-col. 9, ll. 22), wherein the original data for the borderless printing is generated by the application based on the size of the printable region for borderless printing sent in the sending step (i.e. the book editing application is able to edit the original data through changing the print size of the pages and selecting this size to be used during the borderless printing process. The original image data used for the printing is edited by the size chosen by the book editing process and borderless printing option. The book editing application generates this data and sends the information to the other programs or applications in the pipeline to develop and output the information by the printer; see col. 8, ll. 35-col. 9, ll. 22); and

generating the print data of a page which corresponds to the side of the borderless printing based on the original data for the borderless printing (i.e. the printer driver or despooler are both used as applications that generate the print data of a page that corresponds to a side of a page that contains borderless printing. Since two chapters can be on opposite sides of a page, on side can have borderless printing; see col. 10, ll. 31-col. 12, ll. 10) and

the print data of a page which corresponds to the side of the printing with the border by specifying the original data of the printable region for printing with the border

from the original data for the borderless printing (i.e. the system also generates print data of a side that prints with a border based on the book editing application choosing options related to the border selection. The invention allows two chapters involving borderless and border printing to be output on different sides of a page. With the system allowing the different chapters to be on the same page, but on different sides, the original data used for the border printing is considered to be specified by the system from the original data used for borderless printing; see fig. 11, col. 10, ll. 31-col. 12, ll. 62, col. 15, lines 23-58).

However, Mori '696 fails to specifically teach wherein the size of the printable region for borderless printing is wider than a size of a printable region for printing with a border.

However, this is well known in the art as evidenced by Matsumoto '104. Matsumoto '104 discloses wherein the size of the printable region for borderless printing is wider than a size of a printable region for printing with a border (i.e. like the system of Mori '696, Matsumoto '104 deals with outputting print data using printing control information such as border or borderless printing (same field of endeavor). However, Matsumoto '104 discloses a borderless printing option that has a wider layout than the border printing option, which can be seen in figure 12. This reference also specifies borderless printing from border printing when it comes to the original scanned information; see col. 12, ll. 17-32 and col. 16, ll. 21-col. 17, ll. 30).

Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the

prior art being the lack of actual combination of the elements in a single prior art reference.

In combination, Mori '696 performs the same function as it does separately of displaying a first and second screen that sets a basic attribute to be applied to the whole print data and sets a back-side attribute to be applied to the back sides of print media in duplex printing respectively, sending a size of a printable region for borderless printing to an application when border or borderless printing is selected in both the first and second screens, receiving original data for borderless printing from a program, wherein the original data for borderless printing is generated based on the printable region size for borderless printing sent, generating print data of a page which corresponds to the side of the borderless printing based on the original data for borderless printing and generating print data which corresponds to the side of the page for border printing by specifying the original data of the printable region for border printing from the original data for the borderless printing. Matsumoto '104 performs the same function as it does separately of having a size of a printable region for borderless printing wider than a size of a printable region for border printing.

Therefore one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely performs the same function as it does separately.

The results of the combination would have been predictable and resulted in modifying the invention of Mori '696 to include allowing the system to have a borderless printing printable region be wider than the printable region for border printing, as

disclosed by Matsumoto '104, thereby allowing the user to specify if a border is used in the printing control information and the system to make the non-bordered image wider than the bordered image, as stated in Matsumoto '104 at col. 12, ll. 17-32 and seen in figure 12.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made.

Re claim 2: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, the basic attribute is applied for an item other than an item having the back-side attribute (i.e. in the system, when a higher level item, a book attribute, overlaps with a lower level item, a page attribute, the lower level item is given priority when it comes to what attribute to apply to a certain page. For instance, if a book attribute, considered as a basic attribute, overlaps in a setting with a page attribute, considered as a back-side attribute, the page attribute will be given priority and the attribute of the page will occur over the attribute of the book. Therefore, with the following example, the book attribute is applied to other pages in the document that do not have an overlapping page attribute and the feature of having the basic attribute applied to an item other than an item with a back-side attribute is performed with the following example; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62).

Re claim 3: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

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Mori '696 discloses the method, wherein in the generating step, the back-side attribute is applied to, as a unit, one side of the sheet serving as a printing medium (i.e. the page attribute changes the specific page that is authorized by the user. This page can be the back-side or the front side of a document, with a page attribute being applied. Also, the page attribute can be limited to a back-side of a sheet in the document that has a printing method using the duplex printing method. The sheet that has the page attribute serves as a printing medium that will be printed out once the printing is desired by the user; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 5: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, while the basic attribute and the back-side attribute are referred to, various parameters necessary to convert a page corresponding to a front side of a sheet and various parameters necessary to convert a page corresponding to a back side of a sheet are loaded in advance (i.e. before performing the conversion in the system, the settings from the book and page attributes for the front and back-side of the pages are set by the user and loaded into the system after a file is specified and opened. The attributes are considered to be the parameters that allow for the necessary conversions of data into a front and back side page and are loaded into the system in advance before the actual conversion occurs to the specified document; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and

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the parameters are alternately referred to in converting the pages (i.e. using both the book attributes and the page attributes, considered as the parameters, the data formed from the attributes are referred to in order to convert the pages in the user's desired form. Each page is converted by referring to the attributes for each page, from the first page to the last page alternately, to convert each page in the desired manner; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 6: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, every time a page of interest is to be converted, various parameters for use are loaded and referred to by referring to the basic attribute and the back-side attribute (i.e. when a page or pages is to be converted in the system, the attributes that contribute in forming the page of interest is loaded into the system to referred to by the printer driver in order to from the desired book or document. The settings referred to are both the book attributes and the page attributes, which are both considered as the basic and back-side settings; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 9, lines 24-66 and col. 10, lines 1-30, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 15: Mori '696 discloses a printing control apparatus which converts original data into print data processible by a printing apparatus, comprising:

display unit configured to display a first setting screen to set a basic attribute to be applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond not the front sides of printing media but to the back sides of the printing media output in double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

a sending unit to send a size of a printable region for borderless printing to an application when one of the borderless printing and printing with a border in the basic attribute received via the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing. This includes the size of the paper used. The size of the paper can be

selected with borderless or border printing; see figs. 3-4B and 14; col. 11, lines 26-50),
and

another is set in the back-side attribute received via the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed. Also, with the page attributes set for a plurality of pages, this if there are 6 pages that contain 3 of front and back sides, the setting of a page attribute may set both sides of the pages in accordance with a certain setting and this would perform the feature of setting a back-side attribute of back sides of sheets; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62),

a reception unit configured to receive the original data for the borderless printing from the application (i.e. the book editing application can be used to send the original data that will be used for borderless printing to further programs or applications in the pipeline in order for the image data to be output; see col. 8, ll. 35-col. 9, ll. 22), wherein the original data for the borderless printing is generated by the application based on the size of the printable region for borderless printing sent in the sending unit (i.e. the book editing application is able to edit the original data through changing the print size of the pages and selecting this size to be used during the borderless printing process. The

original image data used for the printing is edited by the size chosen by the book editing process and borderless printing option. The book editing application generates this data and sends the information to the other programs or applications in the pipeline to develop and output the information by the printer; see col. 8, ll. 35-col. 9, ll. 22);

a generating unit configured to generate the print data of a page which corresponds to the side of the borderless printing based on the original data for the borderless printing (i.e. the printer driver or despooler are both used as applications that generate the print data of a page that corresponds to a side of a page that contains borderless printing. Since two chapters can be on opposite sides of a page, one side can have borderless printing; see col. 10, ll. 31-col. 12, ll. 10) and

the print data of a page which corresponds to the side of the printing with the border by specifying the original data of the printable region for printing with the border from the original data for the borderless printing (i.e. the system also generates print data of a side that prints with a border based on the book editing application choosing options related to the border selection. The invention allows two chapters involving borderless and border printing to be output on different sides of a page. With the system allowing the different chapters to be on the same page, but on different sides, the original data used for the border printing is considered to be specified by the system from the original data used for borderless printing; see fig. 11, col. 10, ll. 31-col. 12, ll. 62, col. 15, lines 23-58).

However, Mori '696 fails to specifically teach wherein the size of the printable region for borderless printing is wider than a size of a printable region for printing with a border.

However, this is well known in the art as evidenced by Matsumoto '104. Matsumoto '104 discloses wherein the size of the printable region for borderless printing is wider than a size of a printable region for printing with a border (i.e. like the system of Mori '696, Matsumoto '104 deals with outputting print data using printing control information such as border or borderless printing (same field of endeavor). However, Matsumoto '104 discloses a borderless printing option that has a wider layout than the border printing option, which can be seen in figure 12. This reference also specifies borderless printing from border printing when it comes to the original scanned information; see col. 12, ll. 17-32 and col. 16, ll. 21-col. 17, ll. 30).

Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.

In combination, Mori '696 performs the same function as it does separately of displaying a first and second screen that sets a basic attribute to be applied to the whole print data and sets a back-side attribute to be applied to the back sides of print media in duplex printing respectively, sending a size of a printable region for borderless printing to an application when border or borderless printing is selected in both the first and second screens, receiving original data for borderless printing from a program, wherein

the original data for borderless printing is generated based on the printable region size for borderless printing sent, generating print data of a page which corresponds to the side of the borderless printing based on the original data for borderless printing and generating print data which corresponds to the side of the page for border printing by specifying the original data of the printable region for border printing from the original data for the borderless printing. Matsumoto '104 performs the same function as it does separately of having a size of a printable region for borderless printing wider than a size of a printable region for border printing.

Therefore one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely performs the same function as it does separately.

The results of the combination would have been predictable and resulted in modifying the invention of Mori '696 to include allowing the system to have a borderless printing printable region be wider than the printable region for border printing, as disclosed by Matsumoto '104, thereby allowing the user to specify if a border is used in the printing control information and the system to make the non-bordered image wider than the bordered image, as stated in Matsumoto '104 at col. 12, ll. 17-32 and seen in figure 12.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made.

Re claim 17: Mori '696 discloses computer-readable medium storing a computer program for recording a program for converting original data into print data processible by a printing apparatus (i.e. see col. 25, line 45 – col. 26, line 32; also see figure 13), the program comprising the steps of:

displaying a first setting screen to set a basic attribute to be applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

sending a size of a printable region for borderless printing to an application when one of the borderless printing and printing with a border is set in the basic attribute received via the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data

pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing.

This includes the size of the paper used. The size of the paper can be selected with borderless or border printing; see figs. 3-4B and 14; col. 11, lines 26-50), and

another set in the back-side attribute received via the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed. Also, with the page attributes set for a plurality of pages, this if there are 6 pages that contain 3 of front and back sides, the setting of a page attribute may set both sides of the pages in accordance with a certain setting and this would perform the feature of setting a back-side attribute of back sides of sheets; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62),

receiving the original data for the borderless printing from the application (i.e. the book editing application can be used to send the original data that will be used for borderless printing to further programs or applications in the pipeline in order for the image data to be output; see col. 8, ll. 35-col. 9, ll. 22), wherein the original data for the borderless printing is generated by the application based on the size of the printable region for borderless printing sent in the sending step (i.e. the book editing application is able to edit the original data through changing the print size of the pages and selecting

this size to be used during the borderless printing process. The original image data used for the printing is edited by the size chosen by the book editing process and borderless printing option. The book editing application generates this data and sends the information to the other programs or applications in the pipeline to develop and output the information by the printer; see col. 8, ll. 35-col. 9, ll. 22); and

generating the print data of a page which corresponds to the side of the borderless printing based on the original data for the borderless printing (i.e. the printer driver or despooler are both used as applications that generate the print data of a page that corresponds to a side of a page that contains borderless printing. Since two chapters can be on opposite sides of a page, one side can have borderless printing; see col. 10, ll. 31-col. 12, ll. 10) and

the print data of a page which corresponds to the side of the printing with the border by specifying the original data of the printable region for printing with the border from the original data for the borderless printing (i.e. the system also generates print data of a side that prints with a border based on the book editing application choosing options related to the border selection. The invention allows two chapters involving borderless and border printing to be output on different sides of a page. With the system allowing the different chapters to be on the same page, but on different sides, the original data used for the border printing is considered to be specified by the system from the original data used for borderless printing; see fig. 11, col. 10, ll. 31-col. 12, ll. 62, col. 15, lines 23-58).

However, Mori '696 fails to specifically teach wherein the size of the printable region for borderless printing is wider than a size of a printable region for printing with a border.

However, this is well known in the art as evidenced by Matsumoto '104. Matsumoto '104 discloses wherein the size of the printable region for borderless printing is wider than a size of a printable region for printing with a border (i.e. like the system of Mori '696, Matsumoto '104 deals with outputting print data using printing control information such as border or borderless printing (same field of endeavor). However, Matsumoto '104 discloses a borderless printing option that has a wider layout than the border printing option, which can be seen in figure 12. This reference also specifies borderless printing from border printing when it comes to the original scanned information; see col. 12, ll. 17-32 and col. 16, ll. 21-col. 17, ll. 30).

Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.

In combination, Mori '696 performs the same function as it does separately of displaying a first and second screen that sets a basic attribute to be applied to the whole print data and sets a back-side attribute to be applied to the back sides of print media in duplex printing respectively, sending a size of a printable region for borderless printing to an application when border or borderless printing is selected in both the first and second screens, receiving original data for borderless printing from a program, wherein

the original data for borderless printing is generated based on the printable region size for borderless printing sent, generating print data of a page which corresponds to the side of the borderless printing based on the original data for borderless printing and generating print data which corresponds to the side of the page for border printing by specifying the original data of the printable region for border printing from the original data for the borderless printing. Matsumoto '104 performs the same function as it does separately of having a size of a printable region for borderless printing wider than a size of a printable region for border printing.

Therefore one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely performs the same function as it does separately.

The results of the combination would have been predictable and resulted in modifying the invention of Mori '696 to include allowing the system to have a borderless printing printable region be wider than the printable region for border printing, as disclosed by Matsumoto '104, thereby allowing the user to specify if a border is used in the printing control information and the system to make the non-bordered image wider than the bordered image, as stated in Matsumoto '104 at col. 12, ll. 17-32 and seen in figure 12.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made.

Re Claim 19: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

Mori '696 discloses the method according to claim 1, wherein the instruction to decide the basic attribute via the first setting screen is issued by a user operating an OK button on the first setting screen, and the instruction to decide the back-side attribute via the second setting screen is issued by a user operating an OK button on the second setting screen (i.e. this feature is disclosed by the Mori reference since the settings of the front sides of sheets can be set by the chapter attribute shown in figures 15 and 16, and the user can set the setting of a back side of a page using figures 17 and 18. Within all of these figures contains an "*Apply*" or "*OK*" button that can be used to apply or ok the settings performed in each dialogue box. Figure 19 discloses setting a page individually from other pages and the page set individually can be a back page instead of a front side page; see figs. 14-19, col. 17, ll. 15-col. 18, ll. 62).

Re Claim 20: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

Mori '696 discloses the apparatus according to claim 15, wherein the instruction to decide the basic attribute via the first setting screen is issued by a user operating an OK button on the first setting screen, and the instruction to decide the back-side attribute via the second setting screen is issued by a user operating an OK button on the second setting screen (i.e. this feature is disclosed by the Mori reference since the settings of the front sides of sheets can be set by the chapter attribute shown in figures 15 and 16, and the user can set the setting of a back side of a page using figures 17 and 18. Within all of these figures contains an "*Apply*" or "*OK*" button that can be used to apply or ok the settings performed in each dialogue box. Figure 19 discloses setting a page

individually from other pages and the page set individually can be a back page instead of a front side page; see figs. 14-19, col. 17, ll. 15-col. 18, ll. 62).

Re Claim 21: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

Mori '696 discloses the medium according to claim 17, wherein the instruction to decide the basic attribute via the first setting screen is issued by a user operating an OK button on the first setting screen, and the instruction to decide the back-side attribute via the second setting screen is issued by a user operating an OK button on the second setting screen (i.e. this feature is disclosed by the Mori reference since the settings of the front sides of sheets can be set by the chapter attribute shown in figures 15 and 16, and the user can set the setting of a back side of a page using figures 17 and 18. Within all of these figures contains an "Apply" or "OK" button that can be used to apply or ok the settings performed in each dialogue box. Figure 19 discloses setting a page individually from other pages and the page set individually can be a back page instead of a front side page; see figs. 14-19, col. 17, ll. 15-col. 18, ll. 62).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696, as modified by the features of Matsumoto '104, and further in view of Gillihan '262 (USP 6842262).

Re claim 4: The teachings of Mori '696 and Matsumoto '104 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, data generated by an operating system is converted into the print data in accordance with the basic attribute and the back-side attribute while the back-side attribute is preferentially applied (i.e. whether the data is imported into the system, or the file of the document already exist, the data generated by the operating system is converted into the print data that is in accordance with the book attribute information, considered as the basic setting, and the page attribute information, considered as the back-side setting. This can occur by the user setting the appropriate settings and the conversion occurring to the document, after the appropriate settings are entered in by the user and performed by the system; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

However, Mori '696 fails to teach metadata.

However, this is well known in the art as evidenced by Gillihan '262. Gillihan '262 discloses metadata (i.e. As shown in figures 5 and 6, the reference of Gillihan '262 deals with document processing. This document processing is similar to the document processing of Mori '696, since both affect the output of the image data on a printing device. However in Gillihan '262, an electric document can be printed from an

application program to an intermediate metafile that is stored in memory. The intermediate metafile can be edited and translated into a specific PDL in order to be printed by a printer. The metafile is considered to be the metadata since the metafile is simply data that describes some other data, which is the definition of metadata; see col. 5, lines 22-29).

Therefore, in view of Gillihan '262, it would have been obvious to one of ordinary skill at the time the invention was made to have metadata in order to have data transferred to a metafile format that can be used for printing (as stated in Gillihan '262 col. 3, lines 20-36).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Mori '385 (USP 7046385) discloses a book file editing system similar to Mori '385.

11. Nakajima (US Pub No 2005/0253886) discloses an ink jet, printer control unit, printer system including the same, and storage medium with the operation program of the printer control unit stored for controlling double-side printing which discloses a system shown in figure 19 that is able to modify the front and back sides of pages separately.

12. Knodt (USP 5124731) discloses a system where a job can change whether printing can occur on a front side or a rear side of a page. This printing option can be considered as an attribute of a page.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHAD DICKERSON
Examiner
Art Unit 2625

/TWYLER HASKINS/
Supervisory Patent Examiner, Art Unit 2625